

ELECTED CLAIMS

1. An Active Pixel CMOS image sensor device including at least one pixel circuit, comprising:

at least one transistor of a first conductivity type; and

at least one transistor of a second conductivity type, said transistor of the second conductivity type being used for resetting the body of the transistor of the first conductivity type.

2. The Active Pixel CMOS image sensor according to Claim 1, wherein at least one pixel is sensing photo-generated charge by means of modulation of transistor threshold using transistor threshold body effect.

3. The device according to Claim 1, wherein at least one p-type and one n-type transistor share a common gate bus line.

4. The device according to Claim 1, wherein a separate bus line is provided to at least one pixel to supply a reset voltage, and wherein the reset voltage may be changed depending on the pixel.

5. The device according to Claim 4, including an array of pixels in a column, and wherein the reset voltage is changed depending on pixel address within a column of pixels of the array to compensate for the pixel threshold differences along the said column of pixels.

6. The device according to Claim 3, wherein the common gate bus line consists of a stack of at least two conductor layers separated by a dielectric layer, the first layer of the stack being connected to pixel transistor gates, and said conductor layers of the stack being connected to respective driving circuits at the periphery of the pixel array.